

Basic Mechanical

The proper operation of mechanical systems is essential to the sustained operation of critical facilities. Knowledge of mechanical components and systems can increase can increase the dependable and safe operation and maintenance of all types of equipment

The purpose of this course is to provide instruction of basic mechanical theory and principals as it applies to critical facilities mechanical and controls systems. The instructor will use lectures, visual aids and example calculations to provide the optimum learning experience.

Course Duration: 8 hours

INTRODUCTION

Purpose
Presentation Methods
Course Scope

SAFETY ISSUES

Rotating Equipment
Compressed Air
Refrigerant Safety
Chemical Safety

MECHANICAL TERMS

Head
Lift
Approach

MECHANICAL THEORY

Heat Transfer
Carnot Cycle
Psychometric Chart

MECHANICAL OPERATIONS

Design Intent
Common Equipment
Configurations
Economizer Options
Redundancy